

UNIVERSITY OF EDINBURGH

Telephone 42080

Prof. J. Lederberg,
Department of Genetics,
University of Wisconsin,
Madison,
Wisconsin,
U.S.A.

Biochemistry Unit,
Zoology Department,
West Mains Road,
Edinburgh 9.

October 5th 1956.

Dear Professor Lederberg,

During the recent conference
on antibiotics in Milan, I met Dr. Cavalli, who told me that you
had succeeded in making protoplasts of Bacterium coli, and I later
saw a copy of your interesting communication to the N.A.S. on this
subject. I would like to congratulate you on the neatness of
your method. As you will see from the enclosed copy of a
letter to Nature, we have also been trying to make coli protoplasts
here, and I thought you might be interested in our observations.

It is an amusing fact that we have for some time been collecting
information on the action of penicillin on the synthesis of the
components of the cell envelopes of staphylococci and other
"penicillin sensitive" organisms and have obtained partial protection
of staphylococcal cultures from penicillin in media of high osmotic
pressure — which we interpreted as being due possibly to
protection of the protoplasts when cell-wall synthesis is deranged;
but we did not think of using this method for releasing the
protoplasts of Bacterium coli.

I wonder whether the release of coli protoplasts in penicillin-
containing media may include autolytic processes.

It would be most interesting to hear your comments and to know
about the further developments of your work on this problem.

Yours sincerely,

[†]Sept 10th - 14th

Peter Mitchell.